



IfW

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: COMMISSIONER FOR PATENTS, P.O. Box 1450, Arlington, VA 22313-1450

Date of Deposit: May 21, 2004

Selena Whitaker-Paquiet

Attorney Docket No. 13314.1001U PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of Harry S. COURTNEY

Group Art Unit: 1614

U.S. Serial No.

10/771,931

U.S. Filing Date

February 4, 2004

For

STREPTOCOCCAL SERUM OPACITY FACTORS AND FIBRONECTIN-

BINDING PROTEINS AND PEPTIDES THEREOF FOR THE

TREATMENT AND DETECTION OF STREPTOCOCCAL INFECTION

INFORMATION DISCLOSURE STATEMENT TRANSMITTAL

COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir or Madam:

Transmitted herewith for filing is the following:

- 1. Information Disclosure Statement;
- 2. PTO Form /SB/08 (Substitute for form 1449A/PTO) w/attached 25 references; and
- 3. Return-receipt postcard.

The Commissioner is hereby authorized to charge any additional fees, which may be required in connection with the filing of these documents, or credit any overpayment, to Deposit Account No. 19-3555. This sheet is submitted in duplicate.

Respectfully submitted,

Gary M. Myles

Registration No. 46,209

Date: May 21, 2004

SPECKMAN LAW GROUP PLLC

20601



CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: COMMISSIONER FOR PATENTS, P.O. Box 1450, Arlington, VA 22313-1450

Date of Deposit: May 21, 2004

Selena Whitaker-Paquiet

Attorney Docket No. 13314.1001U PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of Harry S. COURTNEY

Group Art Unit: 1614

U.S. Serial No.

10/771,931

U.S. Filing Date

February 4, 2004

For

STREPTOCOCCAL SERUM OPACITY FACTORS AND FIBRONECTIN-

BINDING PROTEINS AND PEPTIDES THEREOF FOR THE

TREATMENT AND DETECTION OF STREPTOCOCCAL INFECTION

INFORMATION DISCLOSURE STATEMENT

COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir or Madam:

The attached form PTO/SB/08 (substitute for form 1449A/PTO) identifies one (1) U.S. Patent Application reference, three (3) U.S. patent references and twenty-one (21) literature references. Copies of these references are enclosed herewith for the Examiner's convenience.

The documents listed on the accompanying form PTO/SB/08 are cited in compliance with the provisions of 37 C.F.R §§ 1.56, 1.97 and 1.98, as amended. Applicant does not concede that the references are "prior art" under 35 U.S.C. §102 or §103, and specifically reserves the right to antedate such materials, as by a showing under 37 C.F.R. § 1.131 or otherwise.

This Information Disclosure Statement is being filed prior to receipt of any substantive Office Action, and no fee or certification is therefore required.

Respectfully submitted,

Gary M. Myles

Registration No. 46,209

Date: May 21, 2004

SPECKMAN LAW GROUP PLLC

20601

PTO/SB/08 (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known for form 1449A/PTO **Application Number** 10/771,931 INFORMATION DISCLOSURE Filing Date February 4, 2004 STATEMENT BY APPLICANT **First Named Inventor** Harry S. COURTNEY (use as many sheets as necessary) Art Unit **Examiner Name** of Attorney Docket Number 13314.1001U Sheet

	U.S. PATENT DOCMENTS							
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
	1	US-2002/0176863 A1	Nov. 28, 2002	Dale				
	2	US-6,619,932 B1	Jul. 169, 2002	Dale				
	3	US-6,063,386	May 16, 2000	Dale, et al.				
	4	US-4,919,930	Apr. 24, 1990	Beachey, et al.				
	5	US-						

FOREIGN PATENT DOCUMENTS									
	Foreign Patent Document Country code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T [®]				
1_1_									
 2					ļ				
3									

•		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
	1	COURTNEY, Harry S., et al.; "Serum Opacity Factor (SOF) of Streptococcus pyogenes Evokes Anitbodies that Opsonize Homologous and Heterologus SOF-Positive Serotypes of Group A Streptococci," Infection and Immunity, Vol. 71, No. 9, pp. 5097-5103 (Sept. 2003)	
	2	COURTNEY, Harry S., et al.; "Molecular Mechanisms of Adhesion, Colonization, and Invasion of Group A Streptococci," Annals of Medicine, Vol. 34, No. 2, pp. 77-87 (2002)	
	3	COURTNEY, Harry S., et al.; "Mapping the Fibrinogen-Binding Domain of Serum Opacity Factor of Group A Streptococci," Current Microbiology, Vol. 44, No. 2, pp. 236-240 (2002)	
	4	BRANDT, Evelyn R., et al.; "Protective and Nonprotective Epitopes from Amino Termini of M Proteins from Australian Aboriginal Isolates and Reference Strains of Group A Streptococci," <i>Infection and Immunity</i> , Vol. 68, No. 12, pp. 6587-6594 (December 2000)	
	5	CUNNINGHAM, Madeleine W.; "Pathogenesis of Group A Streptococci Infections," Clinical Microbiology Reviews, Vol. 13, No. 3, pp. 470-511 (July 2000)	
	6	BEALL, Bernard, et al.; "EMM and SOF Gene Sequence Variation in Relation to Serological Typing of Opacity-Factor-Positive Group A Streptococci," <i>Microbiology</i> , Vol. 146, pp. 1195-1209 (2000)	
	7	COURTNEY, Harry S., et al.; "Serum Opacity Factor is a Major Fibronectin-bBnding Protein and a Virulence Determinant of M Type 2 Streptococcus pyogenes," Molecular Microbiology, Vol. 32, No. 1, pp. 89-98 (1999)	
	8	DALE, James B., et al.; "New Protective antigen of Group A Streptococci," The Journal of Clinical Investigation, Vol. 103, No. 9, pp. 1261-1268 (May 1999)	
	9	DALE, James B., et al.; "Recombinant, Octavalent Group A Streptococcal M Protein Vaccine," Vacine, Vol. 14, No. 10, pp. 944-948 (1996)	
	10	BISNO, Alan L. M.D., et al.; "Streptococcal Infections of Skin and Soft Tissues," <i>The New England Journal of Medicine</i> , Vol. 334, No. 4, pp. 240-245 (Jan 1996)	

	l <u>-</u>			
Examiner	jL	Date		
Signature	lo lo	Considered		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08 (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form	1440A/DTO				Complete if Known	
				Application Number	10/771,931	:
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	February 4, 2004	
JOIAILIN				First Named Inventor	Harry S. COURTNEY	
	(use as many sheets	as necessary)		Art Unit		
				Examiner Name		
Sheet	2	of	3	Attorney Docket Number	13314.1001U	

	U.S. PATENT DOCMENTS							
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
	1	US-						
	2	US-						
	3	US-						
	4	US-						
	5	US-						

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document Country code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY Name of Patentee or Applicant of Cited Document		Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear			
	1				144 - 88 1			
	2							
	3							

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
	11	KREIKEMEYER, B., et al.; "Characterization of a Novel Fibronectin-Binding surface protein in Group A Streptococci," <i>Molecular Microbiology</i> , Vol. 17, No. 1, pp. 137-145 (1995)	
	12	RAKONJAC, Jasna V., et al.; "DNA Sequence of the Serum Opacity Factor of Group A Streptococci: Identification of a Fibronectin-Binding Repeat Domain," <i>Infection and Immunity</i> , Vol. 63, No. 2, pp. 622-631 (February 1995)	
	13	DALE, James B., et al.; "Passive Protection of Mice Against Group A Streptococci Pharyngeal Infection by Lipoteichoic Acid," The Journal of Infectious Diseases, Vol. 169, pp. 319-323 (1994)	
	14	LINDGREN, Per-Eric., et al.; "Two Different Genes Coding for Fibronectin-Binding Proteins from Streptococcus Dysgalactiae," Eur. J. Biochem, Vol. 214, pp. 819-827 (1993)	
	15	SARAVANI, G.A., et al., "Opacity Factor from Group A Streptococci ins an Apoproteinase," FEMS Microbiology Letters, Vol. 68, pp. 35-40 (1990)	
	16	FISCHETTI, Vincent A.,; "Streptococcal M Protein: Molecular Design and Biological Behavior," Clinical Microbiology Reviews, Vol. 2, No. 3 pp. 285-314 (1989)	
	17	DALE, James B., et al.; "Human Cytotoxic T Lymphocytes Evoked by Group A Streptococcal M Proteins," Journal of Experimental Medicine, Vol. 166, pp. 1825-1835 (December 1987)	
	18	DALE, James B., et al.; "Sequence of Myosin-Crossreactive Epitopes of Streptococcal M Protein," The Journal of Experimental Medicine, Vol. 164, pp. 1785-1790 (November 1986)	
	19	WANNAMAKER, Lewis W. M.D.; "Differences Between Streptococcal Infections of the Throat and of the Skin," The New England Journal of Medicine, Vol. 282, No. 1, pp. 23-30 (Jan. 1970)	
	20	KRUMWIEDE, Elma; "Studies on a Lipoproteinase of Group A Streptococci," The Journal of Experimental Medicine, Vol. 100, pp. 629-639 (1954)	

Examiner	Date
Signature	Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08 (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form	1440A/DTO		-		Complete if Known		
				Application Number	10/771,931		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	February 4, 2004		
			AIN I	First Named Inventor	Harry S. COURTNEY		
	(use as many sheets a	as necessary)		Art Unit			
				Examiner Name			
Sheet	3	of	3	Attorney Docket Number	13314.1001U		

	U.S. PATENT DOCMENTS							
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant			
Initials*	No.1	Number-Kind Code ² (if known)	MM-DD-YYYY Applicant of Cited Document	Passages or Relevant Figures Appear				
	1	us-						
	2	US-						
	3	US-						
	4	US-						
	5	US-						

	FOREIGN PATENT DOCUMENTS								
Examiner Cite Initials* No.1	Foreign Patent Document Country code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear					
	1_1_								
	2					<u> </u>			
	з								

OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS							
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²				
	21	WARD, Hugh K., et al.; "Studies on Haemolytic Streptococci from Human Sources," <i>The Australian Journal of Experimental Biology and Medical Science</i> , Vol. 16, pp. 180-192 (1938)					
			 				

			The same of the sa	
Examiner		Date		
Signature		Considered		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.